To:	"Jim Schrempp" <j_schrempp@audiblemagic.com>
From:	"Franck Chastagnol" <fchastagnol@youtube.com>
Cc:	"v_ikezoye@audiblemagic.com" <v_ikezoye@audiblemagic.com>
Bcc:	
Sent Date:	2006-08-17 18:29:40 GMT
Subject:	Re: YouTube evaluation questions

---

thanks Jim - I think we will need this.

Franck

On Aug 17, 2006, at 8:51 AM, Jim Schrempp wrote:

> Hi Franck,
>
> We can select fingerprints to use based on the source. We get
> feeds from the major labels so I think that works for you.
>
> In the IDResponse we currently return just the minor label that is
> associated with the specific track we identify. We could make a
> small modification on our side to return the source of the
> fingerprint, which would be the major label.
>
> Cheers,
> Jim
>
>
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>
> -----Original Message-----
> From: Franck Chastagnol [mailto:fchastagnol@youtube.com]
> Sent: Wednesday, August 16, 2006 9:38 AM
> To: Jim Schrempp
> Cc: v_ikezoye@audiblemagic.com
> Subject: Re: YouTube evaluation questions
>
> Hi Jim,
>
> Thanks for the answers.
> I'll look more in details at how we will be managing our own
> reference fingerprint DB.
>
>
> By owner I meant which media company represents the artist
> (Warner, Sony, Viacom,...).
> Initially, we will ask you to populate the reference fingerprint
> DB with the catalog of only one of those companies.
> (BTW, I assume this is something you can do, correct ?) But as we
> sign new contracts, we will add catalogs from other companies.

> So from fingerprint match API response, we would need a way to
> tell if it is a match for a Warner item, a Sony item, etc...
>
> Thanks,
> Franck
>
> On Aug 15, 2006, at 2:47 PM, Jim Schrempp wrote:
>
>> Hi Franck,
>>
>> I understand your point about the extra work, but our search is
> so
>> fast that one fingerprint here or there doesn't make any
> difference.
>> In fact, 5000 signatures doesn't even change the response time.
> When
>> you decide to delete 25,000 signatures then that might be worth
> doing
>> - maybe - and at that point you can rebuild the databases (which
> is
>> pretty quick) and FTP the updated amdbs over.
>>
>> Our database always returns track_title and track_artist. If the
> track
>> is part of an album, then we also populate album_title,
> album_artist,
>> label.
>>
>> If the album has a UPC (many do not) then we return it.
>>
>> If the track is for sale through MusicNet, then we can return
> the
>> MNetID that you can use to link into their system.
>>
>> About 50% of our track entries have the Recording Owner field
>> populated. Most of the entries from the major labels have a
> value for
>> this.
>>
>> A big question is what you mean by "owner". One master recording
> can
>> have many owners through its lifetime. One master recording may
> appear
>> on several different albums - the publisher of the most recent
> album
>> is not necessarily the current "owner". If our reference
> database has
>> a fingerprint of the same master recording from two different
> album,
>> the one used in the identification is arbitrary.
>>
>> We do offer a service that will add incremental information to
> the
>> IDResponse XML. We can add album information for all of the
> albums
>> that contain the identified master recording. We do this for one
>
>> customer today and it would require just a small amount of

> tweaking
>> for us to deploy it for you.
>>
>> You might also be most interested in whether the identified song
> was
>> owned by one of the big five record labels. We could create a
> service
>> like this for you.
>>
>> As to the other metadata fields in the XML... The extent of the
>> coverage depends entirely on the source we used. We are always
> working
>> to improve the completeness of these fields in our database.
> Once we
>> have made an identification, we extract the associated metadata
> from
>> our master database. It is pretty easy for us to include
> additional
>> metadata fields in the IDResponse.
>>
>> Are there some that you have a particular interest in?
>>
>> Best Regards,
>> Jim
>>
>>
>>
>>
>>
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>>
>> -----Original Message-----
>> From: Franck Chastagnol [mailto:fchastagnol@youtube.com]
>> Sent: Tuesday, August 15, 2006 1:58 PM
>> To: Jim Schrempp
>> Cc: v_ikezoye@audiblemagic.com
>> Subject: Re: YouTube evaluation questions
>>
>> Hi Jim,
>>
>> See answers inline.
>>
>> Also, if you would have any documentation that describes the
> list of
>> fields available in your metadata DB (and their meaning), that
> would
>> help greatly YouTube making a decision regarding whether or not
> we
>> would need this metadata information.
>>

>> Thanks,
>> Franck
>>
>> On Aug 15, 2006, at 6:32 AM, Jim Schrempp wrote:
>>
>>> Hi Franck,
>>>
>>> WRT deleting one fingerprint, is there a reason that you could
>> not
>>> just ignore an identification that is made with a fingerprint
>> you wish
>>> was deleted? It seems like either we have to maintain this
> state
>> or
>>> you do, and this is more connected to your processes than ours.
>> Let me
>>> know your thoughts.
>>
>> it seemed more effective to me to delete the fingerprints from
> the
>> reference DB.
>> this way the correlation server does not have to run correlation
>
>> against that deleted fingerprints.
>>
>>> As to the XML, YouTube was interested in the bare bones service
>> so our
>>> deal with you does not include the actual metadata identity of
>> what we
>>> find. You are currently running against one of our demo servers
>> so you
>>> see the metadata. When you move into production most of the
>> fields
>>> will say "content was identified, no metadata is available".
> You
>> know
>>> that a positive id was made by the status
>>> 2006 in the tag <IdResponse><IdStatus>
>>>
>>> The <AmItemId> in the response is your best unique identifier
>> from us.
>>> It never changes. Never ever.
>>
>> Make sense.
>> Does the <RecordingOwner> field indicates to which company
> (Warner,
>> Sony) owns the right for the song ?
>>
>>
>>> I hope this helps. Feel free to ask any other questions you may
>> have.
>>>
>>> Best Regards,
>>> Jim
>>>
>>> Audible Magic Corporation
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>>>

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>>>
>>> -----Original Message-----
>>> From: Franck Chastagnol [mailto:fchastagnol@youtube.com]
>>> Sent: Monday, August 14, 2006 5:45 PM
>>> To: Jim Schrempp
>>> Cc: thom@musclefish.com; 'Frey Waid';
> v_ikezoye@audiblemagic.com
>>> Subject: Re: YouTube evaluation questions
>>>
>>>
>>> thanks Jim for the answers - it makes sense.
>>>
>>> In terms of API to add/delete fingerprints, I think we may need
>>> something a bit more flexible than sending to AudibleMagic by
>> FTP the
>>> whole fingerprint archive.
>>> An HTTP POST API (or equivalent) that allows to add/delete 1
>>> fingerprint would be much easier for us to integrate with.
>>>
>>>
>>> A few more questions regarding your fingerprinting API:
>>> a. do you have any documentation for this API I could take a
>> look at
>>> ? I'm particularly interested in a definition fro all the
> fields
>>
>>> returned in the XML response.
>>>
>>> b. If there is a match, can we know to which media company it
>>> belongs to ? (Warner, Sony, ...) The XML reponse includes a
>> field
>>> <RecordingOwner> but in my tests, it was not populated.
>>>
>>> c. You mentioned ISRC is not a good choice as unique ID.
>>> The XML response has a field <SigGUID>. Is this the unique ID
>> of the
>>> reference fingerprint that matched the sample we submitted ?
>>> Is this SigGUID guaranteed to be permanent over time (e.g. if
> we
>> store
>>> it in our DB, we can refer to it later and it will point to the
>> same
>>> reference fingerprint in your DB) ?
>>>
>>> Thanks,
>>> Franck
>>>
>>>
>>> On Aug 14, 2006, at 2:05 PM, Jim Schrempp wrote:
>>>
>>>> Hi Franck,
>>>>

>>>> In our discussions with YouTube it was made clear to us that
>>> these
>>>> fingerprints of your own content needed to remain completely
>>> separate.
>>>> We were not to have access to any metadata about them.
>>>> As a result, we planned to use the following available
> process.
>>>>
>>>> 1. We would provide you with two command line utilities.
>>>>
>>>> 1a. The first will create a reference fingerprint file from an
>>> MP3 or
>>>> WAV file (extension: amfp). Sample rate of at least 20050Hz.
> If
>>> using
>>>> MP3, a bit rate of at least 96kbps. The reference audio sample
>>> needs
>>>> to begin at an offset of 0 in the video and be at least 45
>>> seconds
>>>> long. I suggest creating a fingerprint of the entire video
>>> soundtrack.
>>>> The fingerprints are small and this will give you the most
>>> flexibility
>>>> later.
>>>>
>>>> 1b. A second utility will create a reference database image
>> file
>>>> (extension: amdb) by recursing a directory structure
> containing
>>
>>>> fingerprint files. The utility will take a 20 second segment
> of
>>> each
>>>> reference fingerprint from an offset of 7 seconds (as we work
>>> with you
>>>> we may want to adjust this in the future). A set of reference
>>>> database image files can be deployed onto one of our
> IDServers.
>>> We
>>>> recommend structuring your fingerprint archive so that
> database
>>> image
>>>> files contain no more than 100,000 reference fingerprints.
>>>>
>>>> When you send in a fingerprint of an unknown soundtrack for
>>>> identification, you would HTTP POST it to either our music
>>> fingerprint
>>>> IDServer, or the YouTube content IDServer (or perhaps to both
>> at
>>> the
>>>> same time). We had discussed with YouTube that the server
>>> holding your
>>>> specific take-down fingerprints would be set to examine the
>>> unknown
>>>> more exhaustively. You can afford to do that because the
> number
>>> of
>>>> reference fingerprints in your take-down database will be

> small
>>> - on
>>>> the order of 100-200,000 or so.
>>>>
>>>> 1c. One of the input parameters to the fingerprint creation
>>> utility is
>>>> an arbitrary string of up to 50 characters; this string is
>>> embedded in
>>>> the fingerprint file and will be the only identification
>>> returned from
>>>> the identification process. Your application would use this
>>> string as
>>>> an index into your metadata.
>>>> Again, this was part of the requirement to keep us completely
>>> blind to
>>>> the actual metadata of your take-down fingerprints.
>>>>
>>>>
>>>> 2. We do not currently offer an API to query our music
>> metadata.
>>>> We could make one for you. Our preference would be that you
>> post
>>> the
>>>> query in an HTTP transaction and we would return an XML
> package
>>> of the
>>>> result. However, not all of our metadata entries have an ISRC
>>> value.
>>>> If you were to get a hit on ISRC, then you know the song is in
>>> the
>>>> database, but a not-found is inconclusive.
>>>> You should also know that in our experience ISRC is
> unreliable.
>>>> Some labels have used the same ISRC code for different master
>>>> recordings.
>>>>
>>>> This query was not part of the initial contract so if you want
>>> it I
>>>> will have to talk to Vance. I'm sure this would entail NRE
>>> charges to
>>>> you and perhaps a monthly fee.
>>>>
>>>>
>>>> 3. To remove a fingerprint you would remove the fingerprint
>> from
>>> the
>>>> archive and use the utility described above to regenerate the
>>> database
>>>> image. You would FTP the new image to our IDServer. The
>> IDServer
>>>
>>>> checks every 5 minutes for database updates, but it only does
>>> one
>>>> update an hour. Or, your application could simply ignore an
>>>> identification if it was made with a fingerprint you wish to
>>> remove.
>>>>
>>>>

>>>>
>>>>
>>>> What I have described above is the process we envisioned when
>>> talking
>>>> with your team. We are certainly willing to alter the process
>> in
>>> ways
>>>> that will make it easier for you. There will probably be a
> cost
>>> for
>>>> anything other than minor changes.
>>>>
>>>> I look forward to working with you on this project.
>>>>
>>>> Best Regards,
>>>> Jim Schrempp
>>>>
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>>>> -----Original Message-----
>>>> From: Franck Chastagnol [mailto:fchastagnol@youtube.com]
>>>> Sent: Monday, August 14, 2006 11:33 AM
>>>> To: j_schrempp@audiblemagic.com
>>>> Cc: thom@musclefish.com; Frey Waid
>>>> Subject: YouTube evaluation questions
>>>>
>>>> Hi Jim,
>>>>
>>>> I'm working with Frey Weid on the evaluation of the
>> AudibleMagic
>>>
>>>> solution.
>>>>
>>>>
>>>> As you may know, in addition to using the reference
>> fingerprints
>>> of
>>>> copyrighted content provided by AudibleMagic, YT is also
>>> interested in
>>>> adding (and managing) its own reference fingerprints to the
> DB.
>>>> See below some technical questions for you to understand how
> we
>>> would
>>>> be able to achieve this.
>>>>
>>>>
>>>> Also, an unrelated question regarding the MFCBR API:
>>>> For some of the mp3 samples I have been testing with, the API
>>> method

>>>> MFXMLIDRequestAnalyzeAndDestroy returns undocumented error
>>>> 78 and prints "Error: mp3 decoder failure." on stderr.
>>>> Do you know what this error means and how to avoid it ?
>>>> It that helps, I can send you a mp3 sample to reproduce.
>>>>
>>>>
>>>> I would appreciate if you would have time to answer these
>>> questions,
>>>>
>>>> Thank you,
>>>> Franck
>>>>
>>>> ----------
>>>>
>>>> 1. Is there an API to upload a new reference fingerprint to
> the
>>> DB ?
>>>> a. please provide details (type of API: XML-RPC, REST,
>>> other) and
>>>> share any documentation available
>>>> b. what is the preferred format/codec, bitrate, length
> for
>>> a
>>>> reference fingerprints ?
>>>> c. along with standard meta-data (Album, Artist, Song,
>>> Isrc,
>>>> etc...), can YT upload its own meta-data which will then be
>>> returned
>>>> when calling the fingerprinting match API ?
>>>>
>>>> 2. Is there an API to query against the DB to determine if the
>>>> fingerprint of a given Audio (based on ISRC) is present ?
>>>> a. please provide details (type of API: XML-RPC, REST,
>>> other) and
>>>> share any documentation available
>>>>
>>>> 3. Is there an API to remove a fingerprint from the DB ?
>>>> a. please provide details (type of API: XML-RPC, REST,
>>> other) and
>>>> share any documentation available
>>>>
>>>> ----------
>>>>
>>>
>>
>

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple Computer//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<dict>
	<key>date-sent</key>
	<real>1155835780</real>
	<key>flags</key>
	<integer>33815681</integer>
	<key>original-mailbox</key>
	<string>local:///Outbox</string>

```
        <key>sender</key>
        <string>Franck Chastagnol &lt;fchastagnol@youtube.com&gt;</string>
        <key>subject</key>
        <string>Re: YouTube evaluation questions</string>
        <key>to</key>
        <string>Jim Schrempp &lt;j_schrempp@audiblemagic.com&gt;</string>
</dict>
</plist>
```